

## CLAIMS

1. A filtering member comprising a cylindrical body formed by winding a wire there for filtering and cooling a gas by allowing  
5 the gas to pass through from an inside to an outside in a radial direction, characterized in that the cylindrical body is formed by laminating a plurality of pattern layers in the radial direction, the pattern layers being formed into a mesh form by traversing the wire between one winding end portion and an other  
10 winding end portion in an axial direction of the cylindrical body while a traverse direction of the wire is reversed in one winding end portion and the other winding end portion, in the other winding end portion, a plurality of reversal positions are set to reverse the traverse direction of the wire, and a  
15 shortest distance in a circumferential direction between a first reversal position of the plurality of reversal positions and a second reversal position at which the traverse direction is reversed immediately after being reversed at the first reversal position is longer than a shortest distance in the  
20 circumferential direction between the first reversal position and a third reversal position located nearest to the first reversal position.

2. The filtering member according to claim 1, characterized in  
25 that the traverse direction is reversed at the second reversal position after being reversed at the first reversal position, and is further reversed at the third reversal position.

3. The filtering member according to claim 1 or 2,  
30 characterized in that the traverse direction is reversed one or more times in the other winding end portion after being reversed at the first reversal position, and is further reversed at the

third reversal position, and a shortest distance in the circumferential direction between the first reversal position and a reversal position that is set in the other winding end portion during the time until the traverse direction is reversed at the third reversal position after being reversed at the first reversal position is longer than the shortest distance in the circumferential direction between the first reversal position and the third reversal position.

4. A method of manufacturing a filtering member including a cylindrical body formed by winding a wire, characterized by a step of forming a pattern layer of a mesh form on an outer circumferential surface of a shaft member by winding the wire on the outer circumferential surface of the shaft member and laminating the pattern layer in plural numbers in a radial direction of the shaft member in said step, the pattern layer is formed by traversing an wire between one winding end portion and the other winding end portion in an axial direction of the shaft member while a traverse direction of the wire is reversed between one winding end portion and the other winding end portion, in the other winding end portion, a plurality of reversal positions are set to reverse the traverse direction of the wire; and the wire is wound so that a shortest distance in a circumferential direction between a first reversal position of the plurality of reversal positions and a second reversal position at which the traverse direction is reversed immediately after being reversed at the first reversal position is longer than a shortest distance in the circumferential direction between the first reversal position and a third reversal position located nearest to the first reversal position.

5. The method of manufacturing a filtering member according to claim 4, characterized in that the traverse direction is reversed at the second reversal position after being reversed at the first reversal position, and is further reversed at the third reversal position.

6. The method of manufacturing a filtering member according to claim 4 or 5, characterized in that the wire is wound so that the traverse direction is reversed one or more times in the other winding end portion after being reversed at the first reversal position, and is further reversed at the third reversal position; and a shortest distance in the circumferential direction between the first reversal position and a reversal position that is set in the other winding end portion during the time until the traverse direction is reversed at the third reversal position after being reversed at the first reversal position is longer than the shortest distance in the circumferential direction between the first reversal position and the third reversal position.

7. A method of manufacturing a filtering member including a cylindrical body formed by winding a wire, characterized by a step of forming a pattern layer of a mesh form on an outer circumferential surface of a shaft member by winding the wire on the outer circumferential surface of the shaft member and laminating the pattern layers in plural numbers in a radial direction of the shaft member, in said step, a start end of the wire is fixed in one winding end portion of the shaft member, and the shaft member is rotated in one direction, whereby the wire is wound on an outer circumferential surface of the shaft member while the wire is traversed from one winding end portion toward an other winding end portion, and the traverse direction

of the wire is reversed when the wire arrives at the other winding end portion of the shaft member, thereby forming a pattern layer of a mesh form by successively winding the wire on the outer circumferential surface of the shaft member, and the  
5 wire is wound so that a shortest distance in a circumferential direction between a first reversal position of the plurality of reversal positions and a second reversal position at which the traverse direction is reversed immediately after being reversed at the first reversal position is longer than a shortest  
10 distance in a circumferential direction between the first reversal position and a third reversal position located nearest to the first reversal position.